IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (withdrawn) A monolithic bubble ink jet print head comprising:

a substrate having a resistance body to heat ink and an ink supply opening penetrating through the substrate; and

a chamber/nozzle plate comprising:

an ink chamber to hold the ink,

a nozzle to eject the ink, and

an ink supply channel to supply the ink from the ink chamber to the nozzle,

the chamber/nozzle plate being formed on the substrate by patterning a photo resist by a photolithography process using a single photo mask having at least two light transmission rates, so that the ink chamber, the ink supply channel and the nozzle are simultaneously formed.

2. (withdrawn) The monolithic bubble ink jet print head of claim 1, wherein the photo resist is a negative photo resist having a thickness of 10 μm to 100 μm.

3. (withdrawn) The monolithic bubble ink jet print head of claim 2, wherein the photo resist is made of a resin of a photosensitive epoxy group, a resin of a polyimid group, or a resin of a polyacrylate group.

4. (currently amended) A fabrication method of a monolithic bubble ink jet print head

comprising:

providing a substrate having a resistance body formed on an upper surface thereof to heat ink;

forming a photo resist on the substrate having the resistance body;

providing a single photo mask having at least two light transmission rates;

exposing the photo resist to UV light by using the photo mask, an amount of the UV light being between $2mJ/cm^2$ and $4000mJ/cm^2$ to adjust a hardening depth; and

developing the photo resist exposed to the light,

wherein the forming of the photo resist includes forming the photo resist to have a thickness from 35 μm to 100 μm,

wherein the photo mask comprises:

a first part having a relatively high UV transmission rate,

a second part having a relatively low UV transmission rate,

a third part having a UV transmission rate of 0%, and

a fourth part having the ~~relatively low UV~~ transmission rate of 0%~~the second part~~,

the ~~third~~second part being between the fourth and ~~second~~third parts.

5. (original) The method of claim 4, wherein the forming of the photo resist includes forming a negative photo resist.

6. (cancelled)

7. (previously presented) The method of claim 5, wherein the forming of the photo resist includes forming the photo resist with a resin of a photosensitive epoxy group, a resin of a polyimide group, or a resin of a polyacrylate group.

8. (previously presented) The method of claim 4, wherein the forming of the photo resist includes forming the photo resist with a resin of a photosensitive epoxy group, a resin of a polyimide group, or a resin of a polyacrylate group.

9. (original) The method of claim 4, wherein the photo mask used during the exposing of the photo resist to the light has a metallic thin layer formed of at least two thicknesses to form a flow channel structure of an ink chamber, an ink supply channel and a nozzle.

10. (original) The method of claim 9, wherein a source of the light uses UV light and the metallic thin layer is a chrome layer or a chrome oxide layer.

11-13. (cancelled)

14. (original) The method of claim 4, wherein the developing of the photo resist comprises:

selecting a developing liquid of the photo resist, and a solvent including a halogen element, and an alkali solvent; and

dissolving and removing the photo resist.

15. (original) The method of claim 4, further comprising:

forming a protective layer on the photo resist after exposing the photo resist to the light;

forming an ink supply opening penetrating through the substrate on a back surface of the substrate; and

removing the protective layer.

16. (original) The method of claim 15, wherein the forming of the ink supply opening comprises:

forming the ink supply opening by a dry etching; and

cleaning an organic matter flowing into a surface of the substrate during the dry etching.

17. (original) The method of claim 15, wherein the forming of the ink supply opening comprises:

forming the ink supply opening by a wet etching; and

cleaning an organic matter flowing into a surface of the substrate during the wet etching.

18. (original) The method of claim 4, further comprising hard-baking the substrate after the developing of the photo resist.

19. (currently amended) A method comprising:

providing a substrate;

forming a photo resist on the substrate;

providing a single photo mask having first and second light transmission rates;

exposing the photo resist to UV light by using the single photo mask, an amount of the UV light being between $2mJ/cm^2$ and $4000mJ/cm^2$ to adjust a hardening depth; and

developing the exposed photo resist;

wherein the forming of the photo resist includes forming the photo resist to have a thickness from 35 μm to 100 μm,

wherein the photo mask comprises:

a first part having a relatively high UV transmission rate,

a second part having a relatively low UV transmission rate,

a third part having a UV transmission rate of 0%, and

a fourth part having the ~~relatively low~~ UV transmission rate of 0%~~the second part~~, the ~~third~~second part being between the fourth and ~~second~~third parts.

20. (original) The method of claim 19, wherein the developing comprises forming a chamber/nozzle plate of a monolithic bubble ink jet print head.

21. (original) The method of claim 20, wherein the developing further comprises forming an ink chamber, an ink supply channel, and a nozzle in the chamber/nozzle plate simultaneously.

22. (original) The method of claim 19, further comprising providing a heater on the substrate.

23. (original) The method of claim 21, further comprising:

exposing a first polymeric portion of the chamber/nozzle plate to a first amount of the light; and

exposing a second polymeric portion of the chamber/nozzle plate to a second amount of the light, which is lower than the first amount of the light.

24. (original) The method of claim 23, wherein the first polymeric portion comprises the ink chamber and the ink supply channel, and the second polymeric portion comprises the nozzle.

25. (cancelled)

26. (original) The method of claim 19, further comprising coating the photo resist with

a protective layer formed of wax or a high molecular film.

27. (original) The method of claim 19, further comprising:

varying an optical absorption of the photo resist so that a depth of the developed photo resist varies.

28. (original) The method of claim 27, wherein the varying of the optical absorption of the photo resist comprises providing a photosensitizer in the photo resist.

29. (original) The method of claim 28, wherein the exposing of the photo resist to the light comprises exposing the photo resist having varying optical absorption to identical light.

30. (original) The method of claim 21, wherein the forming the nozzle and the ink chamber comprises forming the ink chamber and the nozzle without a boundary therebetween.

31. (new) The method of claim 9, wherein the photo mask forms a plurality of the nozzles, and one of the nozzles is formed for each two of the parts of the photo mask.